






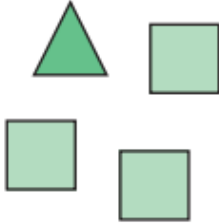


Key Vocabulary	Ratio Language	The Ratio Symbol
ratio	For every 1 circle, there are 2 triangles. 	 <p>The ratio of footballs to rugby balls: 1:4 The ratio of rugby balls to footballs: 4:1</p>  <p>The ratio of circles to triangles: 2:3 The ratio of triangles to circles: 3:2</p>
proportion		
"for every... there are..."	For every 2 bananas, there are 3 apples. 	
part		
whole	For every 1 football, there are 3 rugby balls. 	
scale factor		
enlargement	<b>Ratio and Fractions</b>	
similar shapes	 <p>For every 1 rugby ball, there are 2 footballs. Ratio of rugby balls to footballs: 1:2 <math>\frac{1}{3}</math> of the balls are rugby balls.</p>	 <p>The ratio of apples to bananas: 1:2 The ratio of bananas to oranges: 2:3 The ratio of apples to bananas to oranges: 1:2:3 The ratio of oranges to bananas to apples: 3:2:1</p>
length		
width		
perimeter	 <p>For every 1 triangle, there are 3 squares. Ratio of triangles to squares: 1:3 <math>\frac{1}{4}</math> of the shapes are triangles.</p>	

# Ratio

# Knowledge Organiser

## Ratio and Proportion Problem-Solving

## Scale Factors

To use the ingredients for 1 person, you divide all the quantities by 10 ( $\div 10$ ).

**Ingredients for Fruit Smoothie**  
(serves 10 people)

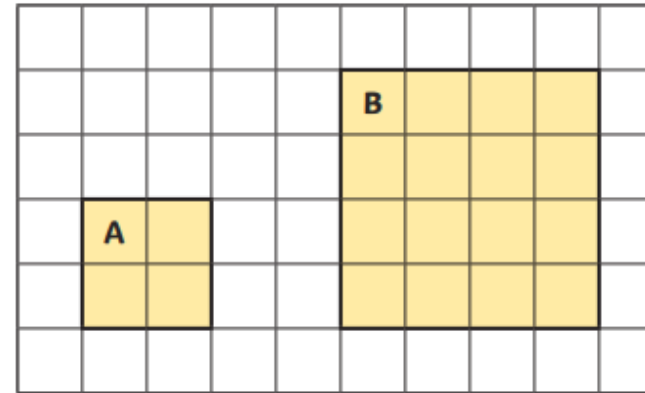
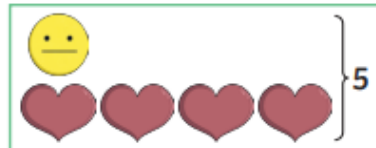
- 800g of bananas
- 500g of strawberries
- 200g of raspberries
- 700ml of milk
- 300ml of natural yogurt

To use the ingredients for 5 people, you halve all the quantities ( $\div 2$ ).

To use the ingredients for 20 people, you double all the quantities ( $\times 2$ ).

In a bag of 15 sweets, there is 1 smiley face sweet for every 4 love heart sweets.

Therefore, there will be 3 smiley face sweets and 12 love heart sweets in the bag.



Shape A has been enlarged by a scale factor of 2 to make Shape B.

Shape B is now two times as big as Shape A.

Shape B has been enlarged from Shape A by a scale factor of 3.

Shape B is now three times as big as Shape A.

